

ABSTRACT OF THE DISCLOSURE

A second gear rotating at a rotation speed faster than a rotation speed of a first gear while meshing therewith, a magnet provided on the second gear and rotating together therewith, and a small angle detection magnetic sensor disposed in a vicinity of where the second gear is fixed and configured to detect a magnetic line of force of the magnet are provided.

5 Meanwhile, a third gear rotating at a rotation speed slower than the rotation speed of the second gear in synchronization with the first gear, a magnet provided on the third gear and rotating together therewith, and a large angle detection magnetic sensor disposed in a vicinity of where the third gear is fixed and configured to detect a magnetic line of force of the magnet are provided.

10 A rotation angle of a steering shaft is calculated based on angle data detected in the small angle detection magnetic sensor and the large angle detection magnetic sensor.

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